



University of Nebraska at Omaha
DigitalCommons@UNO

Student Work

5-1-1975

Relationships between high school forensic experience and college percentages in Pi Kappa Delta

Pat Garrighan

Follow this and additional works at: <https://digitalcommons.unomaha.edu/studentwork>

Recommended Citation

Garrighan, Pat, "Relationships between high school forensic experience and college percentages in Pi Kappa Delta" (1975). *Student Work*. 3115.

<https://digitalcommons.unomaha.edu/studentwork/3115>

This Thesis is brought to you for free and open access by DigitalCommons@UNO. It has been accepted for inclusion in Student Work by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.



RELATIONSHIPS BETWEEN HIGH SCHOOL FORENSIC
EXPERIENCE AND COLLEGE WIN PERCENTAGES
IN PI KAPPA DELTA

A Thesis
Presented to the
Department of Speech Communication
and the
Faculty of the Graduate College
University of Nebraska at Omaha

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Pat Garrighan

May 1975

109 12. 1/2

UMI Number: EP74514

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP74514

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

THESIS ACCEPTANCE

Accepted for the faculty of The Graduate College of the University of Nebraska at Omaha, in partial fulfillment of the requirements for the degree Master of Arts.

Graduate Committee

Name

Department

Dennis A. Fuc

Speech

John K. Brithart

Speech

Ronald J. Grandgenett

Education

Chairman

John K. Brithart

Date

19 February 1975

In starting this study in September 1973 I never dreamed how much work would be required on the part of so many others. First and most importantly I'd like to thank Jack Brilhart for making it possible for me to conduct this study. He has not only continually given me the moral support needed, but has also been willing to guide me through the pilot study as well as through the thesis research.

My thanks need be extended to Mrs. Kathleen Penton, Speech Department Secretary, who helped me design my questionnaires as well as typed them for me. To John E. Baird, National President of Pi Kappa Delta, goes my appreciation for writing a letter granting his endorsement to my efforts.

Finally, I'd like to extend my sincere thanks to the many coaches who took time from their busy schedules to answer my questionnaires. My deepest thanks goes to the 420 debaters who disclosed their win records, high school debate and individual event experience, and high school graduating class size in order to make possible an empirical study of this nature.

TABLE OF CONTENTS

Introduction	1
Survey of Literature	
Statement of the Problem	
Definitions	
Methods and Procedures	7
Data Collection	
Results and Discussion	9
Conclusion and Recommendation	15
APPENDICES	
Appendix I: Research Instruments	17
A. Letter from John E. Baird	
B. Cover letter	
C. Coaches questionnaire	
D. Debaters questionnaire	
E. Reminders	
Appendix II: Tabulations	23
A. The number of high school debate rounds and collegiate debate win percentages	
B. Collegiate debate win percentages of subjects with high school individual event experience	
C. Collegiate debate win percentages of subjects without high school individual event experience	
BIBLIOGRAPHY	31

Introduction

Debate coaches and debaters often find themselves trying to answer the question: "Who makes the better debater, an individual who was a former high school debater or one who began debating at the college level?" The writer has heard coaches express opinions on both sides of the issue as if they were facts. The purpose of this study was to seek an empirical answer to the question. This research should be of value to college coaches and of interest to both college and high school debaters.

Survey of Literature

Prior studies were found that reflect on either criticisms of or attitudes toward debate, personalities of debaters, and debate programs, but no studies were found on the relationship between high school debate experience, individual event experiences, high school class size, and intercollegiate debate win records. Only one study related effectiveness and experience in debate, it was on the high school level, and none dealt on the college level.¹

Willmington found in doing studies of two groups of high

¹S. Clay Willmington, "A Study of The Relationship of Selected Factors To Debate Effectiveness," Central States Speech Journal 20 (Spring 1969):36-39.

school debaters in summer workshops there was a significant correlation between the number of debates and ratings: a product moment coefficient of .575 on the first group and .457 on the second. Although these correlations were significant the amount of common variance between ratings by the judges of the students debating in the workshops and the number of previous debates was relatively small. Willmington did not examine the relationship between win experience and the amount of previous debate experience.

The major finding of the survey of literature is that few studies concerning debate have been conducted. Most writers have relied on their own experience and little more to sustain their judgments.

Following the survey of literature a pilot study was conducted of schools in Pi Kappa Delta, a national honorary fraternity of debate. Questionnaires asking from debaters the amount of high school debate experience they had, as well as their current college win records, were sent to 132 randomly selected schools. As shown in Table 1, results of the pilot study supported the hypothesis that former high school debaters have a higher win percentage in intercollegiate debate than non-high school debaters. The chi square of 25.83 was significant at a p of $< .001$.

TABLE 1.
RELATIONSHIP BETWEEN HIGH SCHOOL DEBATE
EXPERIENCE AND PERCENTAGE OF
WINS IN COLLEGE DEBATE

College Win %	Number of High School Rounds		
	0-20	20-50	50+
0-30	10	1	3
31-50	32	9	12
51-70	16	9	27
71-100	5	2	13
N =	57	31	55

Although the pilot study supported the research hypothesis, further research was needed since only 31 schools actually reported and six of these currently had no debate program of the 132 to which questionnaires were mailed. The pilot study indicated a need for information in a separate area as well, that of the actual amount of debate participation by the Pi Kappa Delta schools.

Statement of the Problem

After the review of the literature revealed a lack of empirical research pertaining to intercollegiate debate win records of high school and non-high school debaters, it was decided to survey the collegiate win records of both former high school and non-high school debaters. The following research questions were posed:

Do Pi Kappa Delta members who were high school debaters have a higher win percentage in intercollegiate debate than those who were not high school debaters?

Do Pi Kappa Delta members who were high school participants in individual events have a higher win percentage in intercollegiate debate than those who were not high school debaters?

Do Pi Kappa Delta members who were from a larger high school graduating class have a different win percentage in intercollegiate debate than those that were from a smaller high school graduating class?

What are the specific reasons for lack of current debate activity at Pi Kappa Delta schools?

The following hypotheses were advanced:

1. Pi Kappa Delta members who are former high school debaters have a higher win percentage in intercollegiate debate than non-high school debaters.
2. Pi Kappa Delta members who were former individual event participants in high school have a higher win percentage in intercollegiate debate than individuals that had not participated in individual events in high school.

3. Pi Kappa Delta members who are from large high school graduating classes have a different win percentage in college debate than individuals from small graduating classes.

The initial choice of Pi Kappa Delta for the pilot study was made because of the writer's access to a directory of Pi Kappa Delta. At the time of the pilot study this was the only organizational directory available to the researcher. The writer's involvement in the pilot study led to the choosing of the expansion within Pi Kappa Delta.

The limiting of this study to Pi Kappa Delta doesn't prohibit generalizing the results. There is no reason to believe that the members of Pi Kappa Delta would have more or less high school debate experience than debaters countrywide. The same holds true for their win records, for all debaters follow the same rules, are evaluated by the same criteria, and are coached along the same lines, regardless of school affiliation.

Definitions

1. Debater--An individual who has participated in an inter-school debate, on a national topic, following some prescribed format for speaking order.
2. High school debater--A high school debater is an individual who has participated in at least one round of

debate with an individual or individuals from another high school.

3. Intercollegiate debater--An intercollegiate debater is an individual who has participated in at least one round of debate with an individual or individuals from another college or university.

4. Non-high school debater--A non-high school debater is an individual who is an intercollegiate debater without having been a high school debater.

5. Individual event participant--An individual event participant is an individual who has participated in an inter-school contest in any of the individual speech events offered at the high school level. These commonly consist of extemporaneous speaking, prose and poetry reading, oratorical declamation, original oratory, dramatic interpretation, radio announcing, and humorous interpretation.

Methods and Procedures

Data Collection

Questionnaires were sent on February 24, 1974, to all 276 schools listed in the directory of Pi Kappa Delta for 1973. Two cover letters were included. The first was from John E. Baird, National President of Pi Kappa Delta (Appendix I). This letter gave his endorsement of the study and urged that member schools take part. The second letter explained the purpose of the study (Appendix I). A coded, stamped, self-addressed envelope was included to facilitate the return of the questionnaires. Along with the letters and return envelope, two questionnaires were sent to the directors of debate of each Pi Kappa Delta school, one for the debate coach and one for the debaters (Appendix I).

As shown in Appendix I, the coaches were asked if they had a debate program or not. If a program was in existence, the coach was asked the number of debaters on the squad and the number of tournaments participated in during a year. If the program had been terminated the respondent was asked when and why it had been terminated.

The debaters' questionnaires asked for a general estimate of the number of rounds of high school debate:

0, 1-10, 11-20, 21-30, 31-40, 41-50, 51-100, and 101 and over. It was believed that an estimate would produce less error than if the debaters were asked the specific number of rounds they had debated while in high school. College competition was left in a general category. Defining competition into categories such as novice, junior varsity, and varsity would lead to uncertainty of definition since each tournament director has the prerogative of defining divisions as he or she chooses, or of not holding separate divisions.

The requested return date of March 21 was stated in the cover letter. On April 1 a follow-up postcard was sent to all coaches who had not returned their questionnaires by that date (Appendix I). The same procedure was repeated on May 1 (Appendix I).

Chi square was chosen for testing the question of whether win percentages of different groups of debaters were distributed differently. The criterion for significance was set at $p \leq .05$. If a borderline case had arisen a more powerful test would have been used, specifically one way analysis of variance.

Results and Discussion

Five weeks after the second reminder was mailed was the author's predetermined cutoff date for using responses. By that date 107 of the 276 schools to which questionnaires were sent had responded, or 35 percent of the potential respondents. Of these 107 schools, 63 (59 percent) had active debate programs. Of these 63 schools, two coaches kept no win-loss records of their debaters.

Thirty-five schools (33 percent of the 107) responded that their programs were currently inactive. Thirteen schools (38 percent of the 35) reported that they were inactive because of a lack of student interest. Nine programs (26 percent) were reported to have become inactive because of a lack of finances. One program (3 percent) was reported to be inactive because of a lack of a qualified coach. The remaining seven programs (20 percent) were inactive for such a length of time that the respondents had no idea why they had been terminated. Five schools of the 35 stated that they were reinstating their programs, but that they were currently inactive. At the time of the cutoff on responses the author was aware of only nine schools that appeared to have programs from their initial responses, but these respondents either did not

include questionnaires or the questionnaires were not usable.

Three sets of data were tabulated for comparisons between variables by chi squares: the number of rounds debated in high school and the current college win percentages, the subjects' individual event experience or lack thereof and current college win percentages, and the number of individuals in the subject's high school graduating class and current college win percentage (data are shown in Appendix II).

In setting up Table 2, showing high school debate experience by current college debate win records as well as the other tables for the performance of chi square, several rows and columns had to be combined so as to obey the rule that "fewer than 20 per cent of the cells should have an expected frequency of less than 5, and no cell should have an expected frequency of less than 1."²

In setting up Table 2 the rows with 1-10, 11-20, and 21-30 high school rounds of participation had to be combined into one row, as did the rows dealing with 31-40 and 41-50 rounds of participation, so as to meet the requirements of chi square. The columns with 0-10, 11-20, and 21-30 percent wins in college debate had to be

²Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, 1956), p. 178.

combined into one column, as did 71-80, 81-90, and 91-100 percent wins. The results of this analysis supported the hypothesis that former high school debaters have a higher win percentage in intercollegiate debate than non-high school debaters. The chi square of 90.60 was significant.

TABLE 2
HIGH SCHOOL ROUNDS BY COLLEGE WIN PERCENT

Rounds	0-30%	31-40%	41-50%	51-60%	61-70%	71-100%
0	25	51	41	22	17	14
1-30	3	17	14	18	8	3
31-50	2	4	9	10	11	3
51-100	2	3	10	14	9	9
101+	1	0	11	23	24	14

Total = 392 $\chi^2 = 90.60$ Sig. < .00001

The second chi square tested the relationship between individual event experience and college win percentage. Here it was necessary to combine the columns with 0-10 percent and 11-20 percent college debate wins as were those with 71-80, 81-90, 91-100 percent. The chi square of 30.70 showed that high school individual event experience is related to having a higher college debate win percentage.

In order to perform chi squares on high school graduating class size and college debate win percentages, again the collapsing of cells was necessary. High school

TABLE 3

HIGH SCHOOL INDIVIDUAL EVENT EXPERIENCE
BY COLLEGE DEBATE WIN PERCENTAGES

Individual Event Experience	0-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-100%
Yes	17	12	20	53	69	50	28
No	18	20	25	36	16	20	13

Total = 397 $\chi^2 = 30.70$ Sig. < .00001

class sizes were set at 1-300, 301-600, and 601 and above. As shown in Table 4, the win percentage columns were combined to read 0-20 percent, 21-40 percent, 41-50 percent, 51-60 percent, 61-70 percent and 71-100 percent. The chi square showed no significant relationship between high school graduating class size and college win percentages.

The results of the study showed that former high school debaters as a group tend to win a greater percentage of their college debates than do individuals that do not have high school debating experience. This same relationship held for individuals that had participated in individual events in high school. In summary, those with past participation tend to win a greater percentage of their debates. However, it became apparent from the table of data that many of the same individuals who were included in the chi square involving

high school debate experience were also included in the chi square involving individual event experience. This cast doubt on the apparent significance of the tests of the first two hypotheses.

TABLE 4
HIGH SCHOOL GRADUATING CLASS SIZE BY
COLLEGE WIN PERCENTAGES

Class Size	0-20%	21-40%	41-50%	51-60%	61-70%	71-100%
1-300	10	40	35	45	35	19
301-600	6	15	25	27	20	12
601+	4	3	20	12	11	5

Total = 354 $\chi^2 = 15.03$ Sig. = .1309

In order to determine whether there was a relationship between high school debate experience alone and college win percentage, between high school individual event experience alone and college win percentage, and both high school debate and individual event experience and college win percentage, additional tests were necessary.

The median test was used as the follow-up test to see exactly where the significance lay. It was used to compare distributions on win percentages of all pairs of the following four groups of subjects: no debate experience; no debate but individual event experience; no individual event experience but debate experience; and both individual

event and debate experience. The only comparison that showed significance was no debate or individual event experience, and both debate and individual event experience. Here the chi square of 32.949 was significant. Hence the first two hypotheses were rejected in favor of the hypothesis that collegiate win percentages is positively related to the amount of experience in forensic events.

Conclusion and Recommendation

Although having either debate or individual event experience appeared to be significant, the median test showed that the real significance lay in having both high school debate and individual event experience. Therefore, the research demonstrates that only intercollegiate debaters with high school debate experience and individual event experience as a group can be expected to have higher win percentages than intercollegiate debaters without high school forensic experience. The first tests did not distinguish between those with debate experience who did and did not have individual event experience, and between those with individual event experience who did and did not have debate experience before involvement in intercollegiate debate.

Further research in this area should be conducted to see if the effect of having high school debate and individual event experience levels off after some level of experience in college debate. A second area that might be explored would be to see if the relationship between past experience and collegiate debate win percentages exists for debaters other than those in Pi Kappa Delta. Thirdly, a nationwide survey should be taken to see if there is a

decline in the number of forensic programs, and if so why.

APPENDIX I

Research Instruments

- A Letter from John E. Baird
- B Cover letter
- C Coaches questionnaire
- D Debaters questionnaire
- E Reminders

February 18, 1974

Dear Chapter Sponsor:

I wish to bring to your attention the enclosed material from Ms Pat Garrighan of the University of Nebraska in Omaha. Pat is a candidate for the M.A. degree and is carrying out a study under the direction of Dr. Duane Aschenbrenner of our National Council.

The study involves a number of our chapters, and I feel certain that the results will be of importance to all of us. Thus I would like to ask you to take a few moments right now to assist in the project, not only as a contribution to Pat but to the entire fraternity.

Sincerely yours,

John E. Baird

Ms. Pat Garrighan
Department of Speech
University of Nebraska at Omaha
Box 688 Downtown Station
Omaha, Nebraska 68101

Director of Debate
Member School of Pi Kappa Delta

Dear Director of Debate:

As part of the requirement for the M.A. in Speech at the University of Nebraska at Omaha, I am conducting a study of the relationship between high school debate experience and intercollegiate win records. Although the prime concern for this data will be the writing of my thesis, I also hope to use it in a paper for a convention, or for the publication of an article. This research is being supervised by Professor John K. Brilhart. My hypothesis is: Former high school debaters will have a higher win percentage in intercollegiate debate than non-high school debaters.

For my research I am surveying all member schools in Pi Kappa Delta. I have previously conducted a pilot study dealing with 50 percent of the schools in Pi Kappa Delta. But due to a deadline that I faced, and lack of responses from many schools I was able to use data from only 1/8 of the schools involved. Therefore, in order to make a valid test of the hypothesis, I need your cooperation in collecting data. Enclosed are: (1) a brief questionnaire for you, and (2) a separate questionnaire with one line for each of your debaters to fill out. Please see that each debater has an opportunity to fill out the questionnaire. I'd suggest that this could be done at a regular meeting of the squad, or after practice rounds. Then place both completed questionnaires in the enclosed stamped, self-addressed envelope, and mail it to me by March 21, 1974 if at all possible.

In return for your assistance, I will send you a copy of the findings and results. I hope you and your debaters will take the time to supply the needed information. Thank you very much for your effort. The results should be of value to all forensic directors and debate coaches.

Appreciatively,

Pat Garrighan

Director's Questionnaire

(To be completed by Forensic Director/Debate Coach)

1. The number of debaters on the squad that have participated in at least one tournament this year. _____
2. Do you have a debate program? _____yes _____no
3. If "no" when was your debate program terminated?

4. If "no" why was your program terminated?

5. If you have an active debate program approximately how many tournaments have you or will you participate in this year?

1-10	_____	31-40	_____
11-20	_____	41-50	_____
21-30	_____	51-	_____
6. If you have the figures available, approximately how many tournaments do you participate in on the average, over the past three years.

1-10	_____	31-40	_____
11-20	_____	41-50	_____
21-30	_____	51-	_____

OPTIONAL - Complete if you want a copy of the results.

NAME _____

SCHOOL _____

ADDRESS _____

Name	Number of students in your high school graduation class	Inter-scholastic individual event experience e.g., public speaking	Number of rounds of interscholastic debating while in high school	Number of Inter-collegiate debate rounds

[illegible]

*If your school has a policy of not disclosing names, please fill in the information without names.

On February 24, I mailed you two questionnaires pertaining to your activity in Pi Kappa Delta and the win/loss records of your debaters. I requested these be returned by March 21, for the writing of my thesis. This is a reminder for their return. If you need additional questionnaires contact me . . .

Pat Garrighan
UNO Dept. of Speech
Omaha, Nebraska 68101

URGENT REMINDER

The information from your school requested in my questionnaire is needed for validity. Please forward this information. If your program has been terminated please explain why. If you are in need of additional questionnaires contact me at

PAT GARRIGHAN
DEP'T OF SPEECH
UNIVERSITY OF NEBRASKA AT OMAHA
OMAHA, NEBRASKA 68101

APPENDIX II

Tabulations

- A The number of high school debate rounds and collegiate debate win percentages
- B Collegiate debate win percentages of subjects with high school individual event experience
- C Collegiate debate win percentages of subjects without high school individual event experience

A

The Number of High School Debate Rounds and
Collegiate Debate Win Percentages

<u>0 Rounds</u>		<u>Continued</u>	
Percent	No. of Cases	Percent	No. of Cases
0	7	43.00	1
9.00	1	44.00	2
11.00	2	45.00	5
12.00	1	46.00	1
13.00	1	47.00	4
14.00	2	48.00	3
15.00	1	49.00	1
16.00	2	50.00	16
18.00	4	52.00	4
19.00	2	53.00	8
20.00	2	54.00	3
21.00	1	55.00	2
23.00	1	59.00	1
24.00	1	60.00	4
25.00	12	61.00	2
27.00	1	62.00	2
29.00	4	63.00	4
30.00	1	65.00	1
31.00	3	67.00	5
32.00	2	70.00	3
33.00	7	71.00	2
34.00	2	74.00	1
35.00	1	75.00	4
36.00	3	80.00	3
37.00	2	86.00	1
38.00	3	100.00	3
40.00	7		
41.00	4		
42.00	4		
		TOTAL	170

1-10 Rounds

Percent	No. of Cases
14.00	1
25.00	3
36.00	1
38.00	1
44.00	1
47.00	2
50.00	3
60.00	1
63.00	1
75.00	1
TOTAL	15

11-20 Rounds

Percent	No. of Cases
13.00	1
25.00	1
33.00	1
34.00	1
39.00	1
40.00	2
45.00	1
47.00	1
50.00	2
53.00	4
54.00	2
56.00	1
59.00	1
60.00	2
63.00	1
68.00	1
74.00	1
75.00	1
TOTAL	25

21-30 Rounds

Percent	No. of Cases
---------	--------------

13.00	1
24.00	1
25.00	1
26.00	1
33.00	1
38.00	1
40.00	1
44.00	1
47.00	1
50.00	2
51.00	1
54.00	1
55.00	2
57.00	1
60.00	2
61.00	1
63.00	1
70.00	3

TOTAL	23
-------	----

31-40 Rounds

Percent	No. of Cases
---------	--------------

40.00	1
48.00	1
50.00	3
55.00	1
59.00	1
60.00	1
62.00	1
67.00	1
75.00	2

TOTAL	12
-------	----

41-50 Rounds

Percent	No. of Cases
20.00	2
25.00	2
34.00	1
44.00	1
48.00	1
49.00	1
50.00	2
55.00	2
56.00	1
57.00	1
60.00	3
61.00	1
63.00	1
64.00	1
66.00	1
67.00	2
70.00	3
81.00	1
TOTAL	27

51-100 Rounds

Percent	No. of Cases
20.00	2
29.00	1
34.00	2
45.00	1
47.00	1
50.00	8
52.00	1
53.00	1
56.00	1
57.00	4
58.00	1
59.00	1
60.00	5
63.00	1
64.00	1
65.00	4
68.00	1
70.00	2
71.00	2
72.00	2
73.00	1
75.00	2
77.00	2
TOTAL	47

101 and Above Rounds

Percent	No. of Cases
0	1
41.00	2
42.00	2
46.00	1
47.00	1
49.00	1
50.00	5
52.00	1
53.00	1
54.00	4
55.00	2
56.00	4
57.00	1
58.00	2
59.00	1
60.00	7
61.00	2
62.00	2
63.00	1
64.00	1
65.00	4
66.00	6
67.00	2
69.00	1
70.00	5
71.00	2
72.00	1
73.00	3
75.00	4
76.00	1
79.00	1
80.00	1
82.00	1
TOTAL	73

B

Collegiate Debate Win Percentages of Subjects With
High School Individual Event Experience

Win Percent	No. of Cases	Win Percent	No. of Cases
0	2	54.00	9
9.00	1	55.00	7
12.00	1	56.00	5
13.00	3	57.00	7
14.00	2	58.00	3
18.00	1	59.00	5
19.00	2	60.00	19
20.00	5	61.00	3
24.00	1	62.00	2
25.00	8	63.00	6
26.00	1	64.00	3
29.00	2	65.00	7
31.00	2	66.00	8
33.00	4	67.00	4
34.00	4	68.00	3
36.00	2	69.00	1
37.00	1	70.00	13
38.00	4	71.00	3
40.00	3	72.00	2
41.00	3	73.00	4
44.00	3	75.00	10
45.00	4	76.00	1
46.00	2	77.00	2
47.00	6	79.00	1
48.00	4	80.00	2
49.00	3	81.00	1
50.00	28	82.00	1
51.00	1	86.00	1
52.00	3		
53.00	10	TOTAL	249

C

Collegiate Debate Win Percentages of Subjects Without
High School Individual Event Experience

Win Percent	No. of Cases	Win Percent	No. of Cases
0	6	42.00	5
11.00	2	43.00	2
14.00	1	44.00	2
15.00	1	45.00	3
16.00	2	47.00	4
17.00	1	48.00	1
18.00	3	50.00	15
19.00	1	52.00	3
20.00	1	53.00	4
21.00	1	54.00	2
23.00	1	55.00	1
24.00	2	56.00	2
25.00	10	60.00	4
27.00	1	61.00	3
29.00	4	62.00	3
30.00	1	63.00	4
31.00	1	67.00	7
32.00	1	70.00	3
33.00	5	71.00	3
34.00	2	72.00	1
35.00	1	74.00	2
36.00	2	75.00	2
37.00	1	80.00	2
38.00	1	100.00	3
39.00	1		
40.00	10	TOTAL	148
41.00	4		

BIBLIOGRAPHY

Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, 1956.

Willmington, S. Clay. "A Study of The Relationship of Selected Factors To Debate Effectiveness." Central States Speech Journal 20 (Spring 1969):36-39.